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ABSTRACT

The work and findings of the Southern Regional Education Board's Nursing Curriculum Project (NCP) for baccalaureate programs, which included faculty development programs for primary nursing care and clinical electives, are discussed. The historical background of primary care in the baccalaureate nursing program is traced, and characteristics of practice are defined for the baccalaureate and master's level. Four faculty development projects were established in the southern region to assist faculty learners to expand their concepts of primary care, view the commonalities of nursing practice as they vary with the setting for practice, and learn new methods necessary for practice in primary care. The four nursing programs were located at Emory University, Mississippi University For Women, Texas Woman's University, and Virginia Commonwealth University/Medical College of Virginia. Each project employed the same general format: an initial, intensive 3-week didactic and clinical session on campus followed by a 9-month period during which each learner worked with a preceptor at home, was visited by the NCP director, and attended one or two seminars. A 3-week summer session was devoted to curriculum planning. Finally, to demonstrate the efficacy of electives for increasing the flexibility of a nursing curriculum and maintaining its relevance to changing health care practices, two southern schools were chosen as sites to develop electives: Dillard University in New Orleans and Hampton Institute in Tidewater, Virginia. The clinical elective provides students experience in industry, schools, geriatrics, rehabilitation, community health agencies, and hospitals. (SW)

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PATHWAYS TO PRACTICE

Primary Care in The Baccalaureate Nursing Program

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Southern Regional Education Board
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PREFACE

The Southern Regional Education Board's Nursing Curriculum Project (NCP) was funded in 1972 by the W. K. Kellogg Foundation of Battle Creek, Michigan, to clarify varying nursing program goals and determine their relationship to each other. The project's specific aims were to develop a set of assumptions about health care needs, propose kinds of nursing personnel to provide the full range of services implied, and propose a blueprint for nursing education to prepare these types of nurses within the education system.

The work of this first phase of the project (1972-1976) was done by a 36-member seminar which met six times over a three-year period to determine the parameters of nursing knowledge and practice, roles for various categories of providers, and directions for future development in programs of nursing education. Recommendations to achieve a congruent system of nursing education were completed in 1975.

Subsequently the Kellogg Foundation set aside $2.5 million to demonstrate the principles of the recommendations in the nursing programs of the South. The demonstration phase of the Nursing Curriculum Project (1976-1982) directly involved 22 institutions and agencies in the 14-state region of the Southern Regional Education Board (SREB). It touched many more through liaison committees, through the work of the individual demonstration projects, and through periodic reports to the Southern Council on Collegiate Education for Nursing.

This monograph, which is one in a series of final reports on the work and findings of the project, was written by Patricia T. Haase. Information to prepare the monograph was taken from annual reports, site visits, and evaluation conferences. In addition, written descriptions of the faculty development projects were submitted by project directors Winifred Hayes (Emory University), Nancy Herban (Mississippi University for Women), Kathleen Tauer and Janet Younger (Virginia Commonwealth University/Medical College of Virginia), and Edith Wright (Texas Woman's University). Fostine Riddick and Shirley Hall of Hampton Institute and Betty Adams and Susan Sargeant of Dillard University were particularly helpful in describing the clinical elective projects.

Staff for this phase of the Nursing Curriculum Project consisted of: Patricia T. Haase, Director; Mary Howard Smith, Coordinator; Barbara B. Reitt, Editorial Consultant; and Audrey F. Spector, SREB Nursing Programs Director.

PRIMARY CARE IN THE BACCALAUREATE NURSING PROGRAM
Historical Background

At one time, all baccalaureate nursing programs were virtually alike, organized on the medical-surgical specialty model around which hospitals and medical schools were also structured. But because professional nursing is not simply a shadow of another profession or of one institutional setting, nurse educators began to move away from the medical-surgical model to develop their own conceptual frameworks. The "broad fields" curricula that resulted were not identical; in fact, most were unique. Moreover, they were filled with requirements that left little or no room for students to make choices or pursue individual interests.

These curricula were singular because they were based on conceptual frameworks that varied widely from one program to the next. A conceptual framework would be constructed by the members of a single faculty on the basis of theoretical concepts concerning nursing practice (e.g., nursing process, health-illness continuum, cultural differences in patients) that they had selected. The concepts selected by different faculties might be similar, but their arrangement in any given program was almost inevitably unique. Clearly, students did not find it easy to transfer from one program to another, even within the same state.

This unhappy fact did not result from lack of faculty commitment or effort. On the contrary, faculties had devoted many hours to developing program, level, and course objectives and delineating competencies expected of their graduates, but there was little consensus among nursing educators about the content that should be included. Nursing programs varied considerably in their requirements for the arts, sciences, and humanities. Some wanted students to master large amounts of natural, social, behavioral, and nursing science; others had minimal science requirements. There was little consensus about requirements for clinical learning opportunities and practice models to be followed.

In 1975, SREB's Nursing Curriculum Project (NCP) recommended that baccalaureate content be organized around core knowledge in both secondary and primary care practice and that one of three areas of concentration be provided as electives: further work in secondary care, further work in primary care, or beginning work in tertiary care. At that time, however, baccalaureate faculty members did not wish to abandon their unique conceptual frameworks and to adopt flexible science and degree requirements; consequently, electives in the baccalaureate nursing curriculum were relatively rare. According to Hipps, Robinson did note a beginning trend in nursing education toward providing field studies, independent study, and electives, but a survey conducted by Hipps revealed that most electives were not taught until 1973 or later. He. investigation of 107 schools showed that by 1977, 57 percent of the programs surveyed offered electives. Of these, however, only 41 percent were in clinical subjects and only 64 percent of those included clinical laboratory experience (Hipps, 1977).

The greatest barrier to offering clinical electives was the belief of many nursing faculty that any specialization would be inappropriate in a generic curriculum, which was intended to produce a basic generalist. Many wondered if the introduction of clinical electives meant that specialization would be encouraged at the baccalaureate level (see Ostmoe et al., 1978). Although the competence achieved by an undergraduate in just one or two courses could hardly be called "specialized," the purists were still unconvinced. They believed that introducing electives into the curriculum would violate a basic tenet that all students should receive the same curricular content. It was a tenet upon which the professional generalist's curriculum was based. Moreover, many skeptics wanted to know how electives dealing with basic baccalaureate content differed from required courses.

Students, on the other hand, worried about the gap between what was offered in school and what was going on in the practice setting. Because of the apparent mismatch between their education and their job demands, they saw curriculum requirements and electives from a different perspective. They demanded a more flexible curriculum and one more relevant to contemporary health care practices. They asked for courses that would give them greater self-confidence upon entering practice and some beginning skills in specialized areas. In short, they sought courses devoted more to current realities.

Clinically oriented faculty were eager to join the movement to focus more directly on students' interests and talents. They saw the opportunity to expand their own and their students' knowledge and abilities in clinical specialty practice. Thus, student demands and faculty interest and expertise combined to create pressure on the schools to offer electives. Hipps ranked the order of proponents' reasons as follows: the desire for a more flexible curriculum, the demand for a more relevant program, the desire for process-based content, the need to introduce specialization in practice, and the need to expand knowledge (Hipps, 1977).

The interest in clinical electives was heightened by the advent of nurse practitioner programs. In these innovative programs, new skills were added to the nurse's basic knowledge. The first practitioner program was begun in 1965 at the University of Colorado by Henry Silver and Loretta Ford. Their program was designed to determine the safety, efficacy, and quality of a new mode of nursing practice purporting to improve health care for children and their families (Ford, 1979). This was a new role for the nurse. The nurse practitioner was initially conceived as a highly skilled, academically prepared community health nursing specialist who would care for people of all ages in the community. The practitioner would make clients' access to health services easier and would improve the continuity and coordination of services. Initially, the goal of the Colorado Pediatric Nurse Practitioner program was to prepare nurses at the master's level for expert practice, teaching, and clinical research. Unfortunately, that purpose was surrendered to accelerating needs for the delivery of primary care services. According to Ford, there came after 1965 an "explosion of quickly generated, short-term, continuing education programs," some of which did not meet minimal academic standards (Ford, 1979, p. 517). Graduates from those courses varied considerably in their abilities to deliver practitioner services. Adult nurse practitioners, school nurse practitioners, and other varieties were developed before the first nurse practitioner could even be evaluated.

The "expanded role," as it was called at that time, fueled the desire of most students and faculty to learn these new skills in primary care. A few nurse educators expressed dismay that nurses would opt for a role that was simply an extension of the physician (as they saw it) when they could be better occupied by advancing nursing practice in hospitals. But by 1975, most nurse educators agreed that these newly acquired abilities would be incorporated into the curricula of both master's and baccalaureate nursing programs.

What still had to be determined, however, was what knowledge and abilities would be inserted at each level or which program would cover what. To answer that question, SREB's NCP defined the characteristics of practice (see Figure 1). Most of the competencies listed belong to the practitioner role, but others are a part of the nurse's basic knowledge, that is, they are abilities that were taught all professional nurses even before assessment and screening functions were incorporated into many programs. For example, public health nurses have long practiced home care, health care surveillance, and family referral to appropriate community agencies.

Functions for baccalaureate students that resemble the practitioner's functions are subsumed under assessment and screening. Preparation in assessment implies that students have learned basic assessment skills and can use instruments in making an examination. They take a health history to complement the nursing history and use clinical skills for observation, palpation, percussion, and auscultation to assess and describe the patient's condition accurately. Preparation in screening implies that students have learned to take a comprehensive history and perform a complete physical examination to differentiate between normal and abnormal findings and to suspect and identify other pathological problems.

By the 1970s, baccalaureate faculties were beginning to introduce this new learning into their curricula—first as electives, particularly in patient assessment, and then as a part of the standard requirements for generalists. Movement was slow because there were too few persons prepared to teach the new courses, and many faculty members were reluctant to relinquish any of the content offered in hospital care of the acutely and critically ill. Fortunately, graduates with screening and assessment abilities chose to work in hospitals and found their newly learned abilities to be particularly valuable in delivering nursing care to the acutely ill. Consequently, faculty members who specialized in various aspects of secondary and tertiary care began to support the inclusion of assessment and screening electives in the curriculum.

Figure 1.

BACCALAUREATE LEVEL

Primary Care: Generalist Abilities

Practice:

- provides services for health maintenance and promotion
  - -by interpreting health for clients within the context of their sociocultural milieu,
  - -by developing goals with clients that are related to the normal stresses of daily living,
  - -by treating or monitoring clients having selected minor pathological conditions;
- consists of processes that enable the nurse to
  - -assess the health of clients with minor or no pathology,
  - -screen and either treat or refer clients needing further treatment or attention,
  - -manage long-term care of clients with chronic problems,
  - -teach the basic health promotion concepts;
- includes making independent decisions about health maintenance;
- is concerned with establishing a data base that is interpreted clinically;
- is based on knowledge that is developing and evolving, is future-oriented, and that contains moderate levels of abstraction and involves critical thinking;
- includes the application of clinical research to decision making;
- occurs in a setting having consultive and referral services readily available.

Primary Care: Elective

Practice:

- serves clients from more diversified populations requiring health maintenance and health promotion services;
- consists of processes that
  - -set the appropriate priorities in meeting needs of the population being served,
  - -coordinate the total services needed by individuals and groups,
  - -use the appropriate consultation and supervision,
  - -include independent primary assessment, such as history, physical, emotional, and developmental diagnostic work-up;
- consists of developing innovative and less standardized processes geared and adapted to meet the needs of individuals, groups, and communities where outcomes are less predictable and require additional monitoring over a longer period of time;
- includes knowing the nature of the community, the services available, and the means of access to those services.

MASTER'S LEVEL

Practice consists of:

- assessing the health-illness status of clients by
  - -securing and recording a complete health history and critically evaluating findings,
  - -assessing individual and family health needs,
  - -performing a complete physical examination using the techniques of observation, inspection, auscultation, palpation, percussion, and communication,
  - -developing a differential diagnosis by discriminating between normal and abnormal findings in health history and physical assessment,
  - -performing selected diagnosis by discriminating between normal and abnormal findings in health history and physical assessment,
  - -performing selected diagnostic tests and procedures,
  - -reaching a specific diagnosis and deciding which clients can be served by the nurse and which clients are to be referred to others;
- prescribing a plan of care;
- monitoring a client's health under plan prescribed:
  - -common medical problems,
  - -stable phases of chronic illness,
  - -uncomplicated ante and post partum care,
  - -care of minor accidents to include suturing;
- counseling and teaching client and family;
- acting independently in meeting health needs through anticipatory guidance and relevant health teaching;
- recognizing forces and resources in a given community that assist or inhibit individuals and families in coping with their ongoing health-illness problems;
- identifying social and psychological factors inherent in health-illness situations;
- coordinating health management.

Part One: Faculty Development

Introduction: The Problem

It was clear that these fundamental changes in nursing practice would necessitate curricular and instructional changes in baccalaureate nursing programs. Not every baccalaureate student would have to be prepared to the fullest extent, as if every RN were going to perform all the functions of primary care, nor would their instructors have to be certified nurse practitioners in order to teach the needed principles and new techniques. Rather, baccalaureate programs would need to develop the skills and abilities of students at varying levels of preparation. All baccalaureate graduates should learn *some* of the knowledge and skills basic to this role for nurses in primary care.

To accomplish such a goal, baccalaureate nursing programs first need to engage in faculty development that enables instructors to upgrade their own skills and abilities in screening and assessment, as well as in patient management and diagnosis. In describing a model for a nurse practitioner curriculum, Zornow clearly outlined the differences in performance standards that the new responsibilities in primary care require (1977). She divided the model into four levels, each subsuming the previous one and assuming a pre-instruction nursing base (see Figure 2 for details). Faculty members in baccalaureate programs should master the pre-certification levels in the Zornow model and begin to acquire competence at the higher levels.

Baccalaureate faculties in the South who agree with the model have worked diligently to incorporate the subject matter into their basic curricula. Their students are now learning to develop a comprehensive data base, to make judgments about the physical and psychosocial status of patients, to record their findings, and to use them to develop nursing care plans. Unfortunately, several baccalaureate programs in the mid-Seventies could not offer instruction in these areas because their faculty members were unprepared. Although opportunities for nursing faculty to acquire assessment and screening abilities have continued to expand, there are still too few to serve all faculty members who desire this additional preparation.

Planning the Projects

Baccalaureate faculties have wanted to integrate primary care concepts and abilities in the baccalaureate curriculum since the beginning of the nurse practitioner movement, but achieving this has at times proven difficult. Some faculty members were unwilling to give up the emphasis on secondary and tertiary care in the curriculum, while others were opposed to the nurse practitioner movement. Compared with such philosophical resistance, the problems connected with equipping faculty with new skills and abilities could seem small.

In 1977, the NCP staff at the Southern Regional Education Board asked all baccalaureate nursing programs in the 14 SREB states to ascertain whether there was enough interest in possible projects in faculty development in primary care to warrant regional coordination. The response indicated that a program was, indeed, needed; positive answers were received from 41 different institutions. Desire for the program proved to have been quite strong, for all the institutions and individuals enrolled in the projects were willing to pay their own travel, tuition, and living expenses. Interest was expressed by faculty in a variety of clinical specialties, including community health, medical-surgical nursing, maternal-child health nursing, and psychiatric nursing.

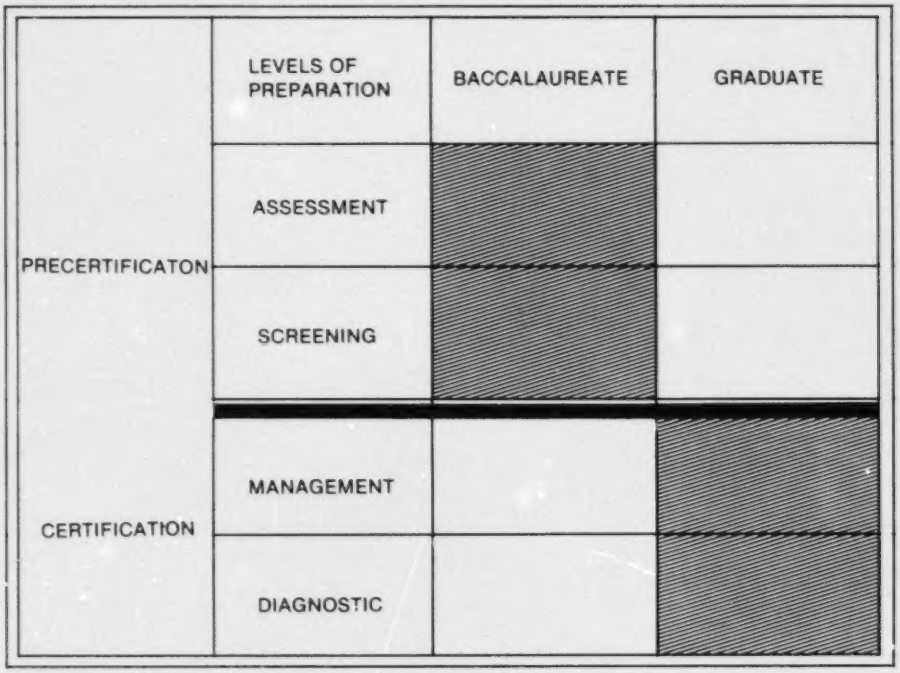
Several planning sessions were held with representatives of interested colleges of nursing. It was agreed that there should be four projects in the region, all having the same overall goals. They would assist faculty learners to: 1) expand their concepts of primary care, 2) add new methodologies to their repertoire of abilities, 3) view the commonalities of nursing practice as they vary with the setting for practice, and 4) develop the behaviors necessary for practice in primary care. Specifically, it was hoped that at the completion of the project participating faculty would be able to:

- perform evaluative procedures, including the history and physical examination;
- assess the health of normal persons or patients with minor pathology;
- detect abnormal conditions that require the attention of the physician;
- make decisions independently; and
- collaborate more effectively with members of other health care disciplines to reach a common goal.

It was agreed that four separate projects would serve the region better than a single overall one could because strategically located sites would provide easier access to education for working faculty members located throughout the 14-state area. Sites were selected with an eye to geographical distribution. Other criteria for choosing locations for the projects were institutional interest, a willingness to share faculty and institutional resources with the region's faculty, a history of success with the development and delivery of nurse practitioner programs, and the presence of an ongoing program in primary care. The four nursing programs meeting these criteria that were ultimately selected as project sites were those at Emory University, Mississippi University for Women, Texas Woman's Uni-

Figure 2.

APPLICATION OF EXPANDED ROLE LEVELS AT DIFFERING LEVELS OF PREPARATION



First Level: Assessment. Preparation at this level implies that nurses have learned assessment skills and can use instruments in making an examination. They take health history to complement the nursing history and use clinical skills of observation, palpation, percussion, and auscultation to assess and describe the patient's condition more accurately and to institute measures for safety and comfort.

Second Level: Screening. Preparation at this level implies that nurses have learned to take a comprehensive history and perform a complete physical examination for the purpose of differentiating between normal and abnormal findings and to suspect and identify other problems, e.g., cardiac murmurs or other obvious pathology. They order appropriate laboratory and radiological examinations and make gross interpretations of results. Precursor to this level of performance is work in advanced anatomy and pathophysiology.

Third Level: Management. Nurses at this level manage the care of patients with selected chronic or acute diseases under the direct supervision of a physician collaborator. Usually nurses wishing more independence pursue further instruction in advanced physiology, pathophysiology, pharmacology, and therapeutics.

Fourth Level: Diagnostic. These nurses are able to function more independently but always in collaboration with a physician, usually in rural settings. They have complete responsibility for all necessary laboratory, radiological, or other examinations. Nurses interpret data and decide on the level of care needed in health care system. They may write prescriptions with advice from backup physicians using protocols if state law permit.

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versity, and Virginia Commonwealth University/ Medical College of Virginia. The projects located at these schools and funded by the W. K. Kellogg Foundation of Battle Creek, Michigan, in June of 1978 were to create opportunities for faculty to educate themselves in primary care abilities. The projects were also designed to increase the number of nursing faculty who would support the idea that an understanding of primary care is an important part of baccalaureate curricula. Altogether, the projects enrolled 65 faculty members from 38 schools representing 13 states.

The Four Project Sites

Emory University is a private institution offering undergraduate and graduate liberal arts and sciences as well as professional studies. The Nell Hodgson Woodruff School of Nursing is an integral part of Emory's Woodruff Medical Center, which represents a variety of health disciplines. The school's library resources and physical facilities are excellent. Located in the large Atlanta metropolitan area, the school has access to a wide variety of clinical facilities and opportunities, including the varied resources of the nearby federal Centers for Disease Control. The School of Nursing offers both bachelor's and master's programs and has offered a nurse practitioner program since 1975.

In 1884, *Mississippi University for Women,* in Columbus, began providing career education for women. Since the initial class of 250, over 40,000 students have been in residence. Nursing education began in 1971 with the implementation of an associate degree program. The baccalaureate program was established in 1973, the master's degree program in 1975, the Department of Continuing Education for Nursing in 1977, and the university had well-established programs in the primary care.

Texas Woman's University, located in Denton, consists of undergraduate and graduate schools of liberal arts and sciences and nine professional schools. The College of Nursing, with a total enrollment of 3,939, is on the Denton campus and also has clinical centers at Dallas and Houston, used primarily for upper-division and graduate programs. TWU also offers a doctoral program in nursing. The Faculty Development/Primary Care project was carried out at the Houston center, which is located within the Texas Medical Center, a complex consisting of Baylor Medical School, the Institute of Religion, the University of Texas Schools of Public Health, Dentistry, Medicine, and Nursing, and numerous hospitals. Clinical resources are plentiful and varied. At the time of the Faculty Development/Primary Care project, the TWU Houston center had been offering a Family Nurse Practitioner program for five years.

The preparation of nurse practitioners has been an important activity of the *Virginia Commonwealth University/Medical College of Virginia* since 1974, as a joint venture of the School of Nursing, the School of Medicine, and the Center for Community Health. Virginia Commonwealth University is located in Richmond; its Health Science Complex includes the Schools of Medicine, Nursing, Dentistry, Pharmacy, Basic Science, and Allied Health, the Center for Community Health, and the Cancer Center. Founded in 1893, the School of Nursing has offered a baccalaureate program since 1953. Currently it provides both generic and "RN track" baccalaureate programs and a master's program. Library, audiovisual, and clinical resources are excellent.

Project Operation

The four projects shared the same overall objective, i.e., to provide instruction and guidance to baccalaureate nursing faculty in learning to incorporate primary health care concepts and skills in baccalaureate nursing programs.

All four projects employed the same general format: An initial, intensive three-week didactic and clinical session on campus followed by a nine-month period during which each learner worked with a preceptor at home, was visited by the NCP director, and attended one or two seminars. Finally, a three-week summer session was devoted to curriculum planning. All four projects observed the same admissions criteria.

Representatives of the four programs constituted a Liaison Committee to share experiences and solve problems together. The committee met several times during the project period, once in a two-day session to consult with a panel of four distinguished national leaders in the field of nursing (Claire Fagin, Sylvia Fields, Loretta Ford, and Virginia Phillips). Content and procedures at the four sites, while having some variations, were similar enough so that a description of Virginia Commonwealth University/Medical College of Virginia program will serve to suggest them all.

Teaching the Teachers: Phase I

The faculty at Virginia Commonwealth University/ Medical College of Virginia (MCV) made the assumption that the participants were entering with many primary health care competencies already in their teaching repertoire. It was assumed that the nursing teachers had the ability to:

- make appropriate referrals based on assessment data;
- apply concepts of chronic diseases in the management of patients on a long-term basis;
- apply concepts of prevention in the maintenance and promotion of health for patients on a long-term basis;

- develop plans for continuity of care in conjunction with other health care providers;
- use teaching and counseling in the promotion of health;
- develop plans for increasing the availability of health care within a given setting;
- use community resources appropriately in providing primary health care to individuals and families;
- establish priorities in meeting the needs of the population being served;
- coordinate total health services needed by individuals and groups; and
- use appropriate consultants and supervision in providing and in teaching primary health care.

With these as the entry-level competencies, the project's task was to add new skills and assist the participants to integrate all of them into a framework for teaching baccalaureate students.

Phase I of the program, which was four weeks long at VCU/MVC and three weeks at the other sites, set the following objectives for the participants:

- perform assessment procedures, including history and physical examinations;
- assess the health of normal individuals or patients with minor pathology;
- detect variations from normal which require the attention of a physician;
- describe the concepts of primary care and their application in the nursing process; and
- compare and contrast roles of primary health care professionals.

The first week was devoted to history-taking of adult and pediatric patients and women with obstetrical and gynecological problems. Participants practiced by taking histories on patients in the VCU/MCV complex and presenting them to classmates and faculty for critique and discussion. The participants used role-playing to sharpen their history-taking techniques. Each student also submitted four written histories for evaluation.

Physical assessment was taught by physiological system. Variations in physical findings that occur by age group were highlighted. The teaching model included a didactic presentation of a particular system in the morning, followed by a skills laboratory in the afternoon. Videotapes and faculty role models demonstrated the techniques of examining each system. The heart-sound simulator and prerecorded breath-sound tapes were used for audio demonstrations. Participants practiced until they felt comfortable with their skills and then were evaluated by faculty according to predetermined criteria. Skills laboratories enabled participants to integrate the systems and to reinforce earlier learning. Finally, each participant was evaluated by a faculty member on the entire physical examination. It was expected that participants would show high scores for correctness of performance. (Skills laboratories maintained a student-faculty ratio of 2:1.)

Attention was focused not only on physical assessment but also on the process of nursing practice; the purpose was to allow participants to examine and strengthen their basic assumptions about nursing practice in primary care. Participants had an opportunity to examine the philosophy of primary health care exhibited by their own schools and to explore crucial issues, such as certification and reimbursement for service. Participants studied primary health care roles and the problems of role change; particular attention was devoted to clarifying the role of the nurse *vis-a-vis* other health care providers.

Teaching the Teachers: Phase II

In their second phase, the projects focused on providing participants with opportunities to practice the knowledge and skills they learned during the summer session. The goal was to enable them to achieve competence in primary health care skills. The preceptorship lasted nine months, with most participants beginning their practice in late August or early September. By the beginning of the summer session, participants were to have contracted with physicians or nurse practitioners who would agree to be preceptors for this period.

Participants usually practiced four to six hours a week in an ambulatory setting, although occasionally students performed physical examinations in an inpatient setting. Preceptors were family practitioners, pediatricians, internists, and family nurse practitioners. The practice settings also varied; they were both rural and urban, and included mental health clinics, student health services, pediatric and adult clinics, and acute care hospitals.

As the participants grew more able, the preceptors invited them to examine clients with physical abnormalities. This exposed the faculty-students to a wider variety of physical findings than they might otherwise have seen. The experience helped them to perceive more clearly the differentiations between the normal and the abnormal, which were more obvious once the abnormality had been encountered clinically.

Project Directors' Site Visits. Directors of the projects made site visits to their participants' practice sites and programs of nursing. The purposes of the site visits were as follows:

- to assess the participants' competence in obtaining histories and performing physical assessments;

- to help integrate these primary health skills with the nursing knowledge they already had; and
- to assess the participants' ability to detect variations from normal.

Another major purpose of these visits was to acquaint other faculty and students at the home institutions with newer concepts of primary care. The directors conducted numerous seminars, workshops, and forums for the faculty and students at the various schools. They also spent time in the clinical area, both inpatient and ambulatory settings, helping the participants perform assessments and obtain histories. Whenever feasible, directors offered immediate feedback after each client had been seen.

Evaluation. An overall evaluation was held at the end of the clinical practice period, first with the participants and then with the preceptor. Directors of the projects, participants, and preceptors discussed problems in the preceptorship and jointly agreed on possible solutions. Follow-up after the site visit was done on an individual basis, which allowed the directors to modify, if necessary, the solutions as they applied to each participant.

Follow-up site visits were similar to those made earlier. By this time, the participants displayed an increased expertise in history-taking and assessment skills. As these skills became increasingly familiar, participants were able to focus on previous nursing knowledge and integrate it with their primary health care skills.

Initially, many of the physician preceptors accepted the participants on a trial basis. As months passed the early tolerance gave way, in most instances, to collaborative relationships. Many of the participants are continuing to practice with their preceptors; several were offered regular positions with them. As a result of the success of this initial project, preceptors have continued to accept other students.

Applying the New Skills in the Classroom. Midway through the project, the participants began to share their knowledge and skills with their students in the classroom and the clinic. They also began to experiment by introducing pertinent history-taking questions and assessment abilities into the units they taught. For example, one participant who taught a particular disease condition began by discussing how to obtain a history related to this problem, and what the student might find by carefully examining the patient. Because the participants felt comfortable with their own skills, they were able to begin the process of integrating primary care concepts and skills into the existing curriculum considerably earlier than they had anticipated. These curricular ideas were to prove extremely helpful as the participants began to prepare for the final instructional period (Phase III).

Teaching the Teachers: Phase III

Finishing the Curriculum Projects. The three-week summer session provided time for the participants to finish curriculum project work which had been assigned at the end of Phase I. Each had been given specific instructions to:

- assess his or her school's philosophy and conceptual framework in regard to primary care content;
- assess the faculty's interest in and knowledge of primary care;
- discuss with colleagues how best to implement primary care in their courses;
- explore means for implementing primary care instruction throughout the curriculum; and
- write a unit of instruction in primary health care.

Participants arrived for the curriculum workshop prepared to share their units of instruction. Curriculum consultants worked with the participants to (1) examine the curriculum for clear and obtainable objectives as well as appropriate didactic and clinical content in primary care concepts and skills, and (2) evaluate the students' performance and the faculty's feelings about teaching these new skills without formal preparation. An evaluation session was held with the dean, the project participants, and other faculty regarding the impact that this project had had on the school, its faculty, and its students.

The Use of Consultants. All four sites utilized various consultants during the last phase of the project to enhance the attainment of objectives for curriculum planning. One of the consultants, a family nurse clinician practicing in collaboration with a family practice physician in a rural setting, helped participants gain further insights into competencies needed by baccalaureate nurses delivering primary health care. Another nurse consultant helped to identify primary health care concepts and skills appropriate for baccalaureate nursing programs and to analyze change theory and strategies for the ultimate attainment of the project's goal.

Many issues that are involved were discussed, debated, and resolved, sometimes with much intensity and feeling. The expectation that a faculty member should have an ongoing practice and should demonstrate certain clinical competencies, specifically in primary health care skills such as physical assessment, prompted the most heated dialogue. Because the participants had become comfortable with one another, they were able to risk censure and share their anxieties and concerns. Although they acknowledged the constraints of time and other faculty responsibilities, and expressed continuing anxiety about lack of practice time and pressure of other faculty obligations, the group finally made a

commitment to the concepts of faculty practice and clinical expertise in primary care.

The Faculty Participants

Baccalaureate nursing faculty representing colleges and universities in 13 Southern states participated in the project. They came with varied educational preparations, skills, backgrounds, motivations, expectations, and anxieties. Some were funded by their home schools; others personally assumed the total cost of the program. Of the 65 faculty participants beginning the project in June 1978, 55 completed the program successfully.

The skills and concepts that are part of acquiring primary health care competencies were new to most participants. Perhaps because new psycho-motor skills and a new role were involved, faculty participants initially expressed anxiety regarding project expectations. At first, these fears and concerns were not overtly expressed, but eventually participants were able to talk about their recent transition to the role of student.

Participants expressed some lowering of their self-concept as a result of assuming the student role. They were highly motivated and competitive learners. Many asked how they compared with their peers, and in the next breath, they stated they were sure everyone else knew more and performed better than they did. Many had not practiced actively in a clinical setting for several years, a fact that added to their lowered self-esteem. At the same time, however, they recognized that, as teachers, prior constraints on their time made ongoing clinical practice very difficult.

At the beginning of the preceptorship, participants exhibited a return of some anxiety about their performance, but gradually their self-confidence reasserted itself. However, other process-related problems arose. In many cases, faculty participants found it difficult to be assertive, that is, to straightforwardly communicate their thoughts, questions, and needs to their preceptors, and to secure needed practice time in the face of other faculty responsibilities. Partly because of these problems, the quality of the preceptorship experience varied among participants. It was beneficial for participants to recognize their own need to develop appropriate assertive behaviors that would enable them to accomplish their own educational goals. The experience provided insight into the assertive behaviors required of a nurse providing primary health care. One project site, Mississippi University for Women, included assertiveness training in its program and provided planned experiences in values clarification during the initial three weeks.

The participants enthusiastically supported the project. The impact on them personally was evidenced by a variety of behavior changes. Many showed an increased self-confidence in their teaching skills, more resourcefulness in locating and negotiating with preceptors, and increased success in their negotiations for the time necessary for clinical practice.

The issue of faculty practice was a very real concern for the participants during the project and has carried over into the period following its conclusion. Ongoing faculty practice to keep skills current is seen not as a luxury but as an essential component of faculty activities.

Outcomes and Conclusions of the Projects

Directors of the projects agreed that it was a rewarding experience to work with the participating faculty from throughout the Southern region. The exchange of ideas, concerns, and suggestions among participants and the project faculty was an especially fruitful outcome of the faculty development program.

Several teaching strategies were used to good effect, particularly when the project directors became traveling scholars. Faculty at Emory University assigned biweekly case studies that focused on common health care needs and problems. Assessment, analysis of clinical data, and planning for intervention, including the need for consultation and referral, were stressed. The Emory project director made "cluster visits" to central sites, providing participants who were geographically close to each other with the opportunity to meet together to discuss their preceptorship experiences, review case studies, view audiovisual materials, and plan for future group sessions.

The participants in the project centered at Mississippi University for Women were scattered over a wide geographical area, and its physician preceptors were practicing in both rural and urban areas. The project faculty traveled extensively to make site visits to assess clinical performance, discuss and resolve home-school/preceptor demands, and assist participants in their assumption of their new roles. The project also experimented with the weekend format for instruction of the participants.

At Texas Woman's University, the last session, centered on curricular planning for participants' home schools, was particularly rewarding for faculty and participants. During the first week of this session, two days were used to view videotapes on the issues and concepts in primary health care and the role of the baccalaureate faculty in teaching these precepts. Each tape was followed by a group discussion. Individual participants were also conducting library study and consulting with one of the project faculty members whose area of expertise is in curriculum design. The purpose of these experiences was to assist participants in designing a curricular project

in primary health care that they could begin to institute in their home schools.

Participants also had the opportunity to consult with nurse clinicians who provided further insights into the depth of the ability in screening and assessment that would be required of baccalaureate graduates. Finished curriculum projects were submitted by participants and critiqued not only by the consulting nurse clinicians but also by project faculty and other participants. Change theories and strategies for incorporating the identified concepts and skills into the curriculum were important components of these presentations. One group of participants developed outcomes, stated as competencies, reflecting the totality of primary health care that should be taught in the baccalaureate curriculum. Another participant focused on the abilities and knowledge to be expected of a basic generalist in psychiatric mental health care nursing. A third focused on primary health care concepts and skills expected at a senior level of nurses working with a selected rural population group.

Emory University's final session included an evaluation of the preceptorship and post-clinical and written examinations. Activities during the remaining time emphasized the participants' role in curriculum development. Participants also developed a statement of baccalaureate student outcomes for community health nursing and identified curricula strands essential to community health and specific competencies for the assessment process.

As participants struggled to find time for their preceptorships during the academic year, the issue of faculty practice came to the forefront. Many nurse educators have deeply regretted that the demands of academia have made it so difficult, often impossible, even to keep up their clinical skills, much less refine and expand them.

There are a few schools where faculty members are expected to practice, but their number is very small and is not likely to increase as long as the cost to a university for maintaining a practicing faculty remains high. Nursing programs themselves are costly, and the addition of practice loads to teaching loads increases those costs considerably. The solution to the problem lies with arrangements that generate income or somehow reduce costs: for example, the use of nursing clinics for both student and faculty practice, joint appointments of faculty to service institutions where money changes hands, and the institution of continuing education programs whose profits are returned to the nursing school.

In some medical science centers, nursing clinics, as well as joint nurse-physician ambulatory care clinics, are now being developed by faculties. Such clinics have many purposes: assuring student and faculty practice in primary care, providing services for fees that will return to the school, and serving a small health service population. Practice in such clinics is defined by state statute, and medical consultation and referral are readily available.

The School of Nursing at the University of Alabama at Birmingham established nursing clinics for faculty and student practice early in the 1970s. Most of the clinics are operated and maintained in city-financed housing projects and are staffed on a regular basis by nursing faculty and students. Thus, most serve indigent patients, with the exception of one located in a church whose clientele is in the middle-income range. The services offered in these clinics extend from well-child care to care for the aged. Nurse practitioners are available to supervise students, as are other faculty members who have learned assessment and screening skills through the school's faculty development program. The School of Nursing has made a major commitment to educating faculty for primary care. Beginning in 1972, all teachers were given instruction and supervision in assessment and screening techniques. Most important, in recent years, the faculty members have been provided with a paid release quarter to enhance their practice in a clinical specialty of their choice or to initiate and complete applicable research.

In Georgia, nurse practitioners have for several years provided health care services for the Department of Offender Rehabilitation. The work began with a student's interest in prison health. Through the auspices of the Emory University Nurse Clinic, the student began extending services at a prisoner pre-release site in the early 1970s. These services were at first addressed solely to nursing problems, but they have since been expanded by nurse practitioner faculty to include pre-release physicals and episodic illness care. The program initially served only women prisoners, but once the service proved to be successful, the program was expanded to include men. Now, nurse practitioners are employed at all pre-release sites (community centers that are minimum-security areas for prisoners about to be paroled or discharged).

There are many examples of such innovative practice sites and nursing clinics. Faculties looking for opportunities for nursing practice need not look far; there are many ways that students and faculty alike can be provided with settings in which to gain experience in assessment and screening. Whether or not the nursing services delivered will generate much income depends largely upon the assertiveness of the faculty initiating a school's connection with the service site and upon the health care economy generally. Unfortunately, third-party payment to nurses delivering care to indigent populations in urban areas has a poor record to date.

Joint appointments are nothing new to nursing faculty members, but recently they have taken on new luster as a source of income for sponsoring

schools. At Yale University and elsewhere, faculty members are encouraged to seek joint appointments with health service agencies that are willing to pay part of their salaries. Monies so earned may be paid directly to the university, which then issues one check (rather than two) to the faculty member, or the university may pay the clinical agency, which then pays the faculty member's salary. The practice results in increased income for the schools of nursing that participate in such arrangements. The additional funds are added to the university appropriation, and consequently, more faculty can be employed who are free both to teach and to practice. The arrangements relieve the burdensome load on the typical harried nurse faculty member who is committed to teaching, working on committees, writing, and research.

The experience of the four faculty development projects falls short of programs like Yale's. Clearly, individual nurse faculty members will continue to have an uphill struggle as they attempt to maintain practice skills and knowledge as a part of their academic responsibilities. Project participants complained of having too little administrative support. Their time was totally taken up with committee and teaching assignments, they said. Moreover, conducting research and writing for publication is necessary for promotion and tenure. As Fagin recommends, each institution will need to identify and develop its own model for the faculty-clinician role because of the differences in administrative organization from school to school (1978, p. 35).

The four demonstration projects for faculty development have made a significant contribution to baccalaureate nursing education in the South. Project directors' reports show that 55 faculty members completed project work, representing 38 different baccalaureate programs. If it is assumed that each of these teachers advanced the assessment and screening abilities of 40 baccalaureate students, the number of future RNs reached totals 2,200.

In the locales of the schools represented by program participants, the four projects stimulated increased interest in nurses' involvement in primary care. Evaluators say that the projects should be seen as trailblazers, both in having improved the range and quality of health services extended and in having helped to improve relationships within the health care community. In addition, project participants located new ambulatory care settings where students could be provided with experience. Preceptors, many of whom were reluctant to accept students at first, became more interested in the contributions that nurses can make to primary health care, even to the point of offering employment to participants. Obviously, a general feeling of good will was generated by the work of the programs.

Of equal importance is the value of the projects in pointing to a successful format for giving nursing faculty an opportunity to broaden horizons and increase skills without having to make the long-term commitment required by further graduate study. Most of the participants paid their own expenses for travel, lodging, books, and equipment because they so greatly desired this opportunity to learn.

The overall project goal was to provide instruction and guidance to baccalaureate nursing faculty who wished to learn how to incorporate assessment and screening abilities in their baccalaureate nursing programs. The consensus of the four project directors was that this initial goal had been attained, and project participants concurred. As a bonus, several of the participants were motivated by the project to go on to higher level education programs that will qualify them for certification in primary care.

As with all projects of this kind, all the outcomes are impossible to measure because their impact is so often both long-range and diffuse. Nevertheless, it is the conclusion of the directors and the NCP staff that the value of projects such as these four is substantial, not only for nursing education but for the quality of health care as well.

Part Two: Clinical Electives

The NCP recommendation on electives in the baccalaureate program lost none of its appropriateness as the 1970s progressed. As more emphasis was placed on primary health care in the delivery system, the number of electives in assessment and patient management grew rapidly. Also, as intensive care and specialty units proliferated, graduates were called upon to assume additional responsibilities in hospitals, where the level of illness in admissions was rising noticeably. Moreover, qualified professional nurses (RNs) working in every kind of setting were assuming many functions once performed only by nurse practitioners (Ford, 1979, p. 516). It was becoming the norm to see RNs in ambulatory care clinics, inpatient services, long-term care institutions, patients' homes, and other health care settings performing physical and emotional assessment, screening, and patient management.

To demonstrate the efficacy of electives for increasing the flexibility of a nursing curriculum and maintaining its relevance to changing health care practices, the W. K. Kellogg Foundation funded two Southern sites to develop electives: Dillard University in New Orleans and Hampton Institute in Tidewater, Virginia. Faculty at these institutions were well aware of the problems of placing clinical electives in baccalaureate programs, especially the problem of making room for them in the curriculum, which may be particularly difficult in an integrated curriculum.

Dillard University

The faculty of the Division of Nursing at Dillard University perceived that the scope of nursing in the 1970s was broadening far beyond previous boundaries. Indeed, the baccalaureate program, which had appropriately included an introduction to all components of nursing, was in danger of graduating generalists who practiced in hospitals designed for specialization. The faculty saw in this situation the possibility that the Division's tradition of producing well-equipped graduates would be jeopardized.

Dillard's origins date back to 1869, when the American Missionary Association of the Congregational Church founded Straight University and the Freedman's Aid Society of the Methodist Episcopal Church established Union Normal School (later New Orleans University). The two merged in 1930, becoming Dillard University, named in honor of James Hardy Dillard, distinguished for his significant contributions to the education of blacks in the South. The institutions have never made any distinctions based on race, religion, or sex in the admission of students or the employment of faculty. Today, Dillard University occupies a 62-acre campus close to downtown New Orleans and enrolls 1,208 students in five divisions: Nursing, Natural Sciences, Education, Humanities, and Social Sciences.

Like the university itself, the Division of Nursing has a long history. In 1889, what was then New Orleans University opened Flint Medical College, which included the schools of pharmacy and nursing and was affiliated with Sarah Goodridge Hospital and Nurse Training School. When the medical college was discontinued in 1911, the hospital, including the nursing school, was continued as the Flint-Goodridge Hospital, with an expanded bed capacity. In 1942, the nursing school was centered in the university itself rather than in the hospital, and by 1952, it had become the first accredited baccalaureate nursing program in Louisiana. As of May 1981, the Division of Nursing had produced 604 graduates, of whom approximately 65 percent are now working in hospitals or community health agencies, one-third as head or charge nurses. A number of students have gone on to graduate schools, and several have continued their studies to the doctoral level.

With this history of leadership, the Division of Nursing was concerned about continuing to insure the effectiveness of its graduates in the expanding world of health care. The recommendation of the NCP urging an "area of concentration" in the baccalaureate program appeared to be one way to do this. The Division was already able to give some baccalaureate students an opportunity to develop special skills in psychiatric and mental health nursing through its Mental Hygiene Training Project and the faculty was interested in providing a means for selected students to develop similar special expertise in another clinical area. The nursing care of children was chosen, with the general objective of making the graduate competent to begin practice in a specialty setting.

The Elective Course

The baccalaureate curriculum at Dillard is organized on the basis of three concepts: the health-illness continuum, human nature, and the nursing process.

Ten courses based on the matrix formed by these concepts make up the upper-division nursing major.

Principal threads running throughout the curriculum include health and illness, stress, coping, time, space, growth and development, integrity, resistance, communications, leadership, and research. Project planners knew that they had to develop elective coursework that would fit the conceptual framework of the curriculum.

The elective was designed for students who had already completed introductory work in the nursing care of both children and adults. The first step in planning the course was to discover what senior students needed to learn about pediatric nursing. This information was obtained by analyzing students' scores on the appropriate part of the National League for Nursing (NLN) Achievement Tests, reviewing their performance in previous courses, administering pre-tests, and interviewing potential enrollees, including recent Dillard graduates, in the course. Relevant professional literature was reviewed as well, to assist in projecting content and emphases.

The three-hour course that was finally developed, entitled "Advanced Pediatric Nursing," centered on the physical assessment of infants and children and the nursing care of hospitalized children. It was intended to facilitate the student's transition from the academic and theoretical to the pragmatic and practical, making heavy use of instructional simulation laboratories in both Flint-Goodridge and Children's hospitals. Teachers drawn into the planning and delivery of the course included the project director, who had expertise in both community health and maternal-child nursing, and faculty members who specialized in rehabilitation, respiratory diseases, psychiatry and mental health, and nutrition and diet therapy. A pediatrician served as a part-time consultant to assist with instruction in physical assessment and other aspects of the course.

The course was first offered to seniors in the fall semester of 1979. Twelve students enrolled in the first semester; 15, in the spring semester. In 1980, 23 enrolled, and in 1981-82, the entire senior class took the course.

Course format included seminars, lectures, clinical sessions, and clinical laboratory experiences. In addition, provision was made to strengthen weaknesses revealed in the pre-test and the NLN Achievement Test by the use of various tutorial arrangements.

Physical assessment, which in 1979 was not included in the generic program at Dillard, was a most important aspect of the course. To facilitate the instruction of this material, an on-campus Pediatric Learning Laboratory was established, with tools for physical and developmental assessment and with an audiovisual laboratory next door. The learning laboratory provided students with the opportunity to practice skills without the distractions and stresses of the real clinical situation. They were free to use the laboratory at any time, with at least one member of the project faculty always present to offer support and guidance. Immediate feedback came not only from teachers, but also from clients, who were often the students' own children or the children of relatives and friends. Mostly, well children were examined.

Physical assessment was not taught as a separate unit, but as a part of the nursing process in each unit. For example, examination of the heart, lungs, and thorax was included in the unit on cardiopulmonary disorders of infancy and childhood. Physicians demonstrated the performance of physical examinations on children of different ages, and students returned the demonstration as a part of their final examination in the course.

Content included care of the pediatric client with cardiopulmonary problems, with hemostatic disturbances, with alterations in immunological responses, with psychiatric problems, and care of the high-risk neonate. In addition to the clinical facilities at Flint-Goodridge and Children's hospitals, the course also included a field trip to Southeast Louisiana State Hospital, where students could observe inpatient care of emotionally disturbed children, and a brief laboratory experience at a neonatal intensive care unit.

Instructional methods included lectures, demonstrations, simulations, slides for student review of body systems and pathological processes, self-instructional modules, and clinical laboratories. In addition, students learned by teaching clients and parents and by preparing a record for each client.

Pre-tests established a baseline of information prior to the beginning of each unit. Behavioral objectives were specified for each laboratory session, and skills were taught with reference to their application in more complex situations.

During the course, students noticeably improved their ability to apply the theoretical material from the classroom in the clinical setting and to use clinical experience as a base for further learning. They became increasingly self-directing, identifying their own learning needs and finding clinical experiences that would meet those needs. For example, to improve their communication skills with parents, four students attended a Parent-Effectiveness Training program sponsored by a local agency.

Evaluation of the Course

Students were given pencil-and-paper pre- and post-tests on course content, supplemented by faculty observation of student-client/parent interaction. Faculty members observed students in the clinical laboratory to see if they were using essential skills in practice. Their physical assessment skills were evaluated individually by appointment.

The effectiveness of the program was determined by surveying student attitudes and reactions and by analyzing the performance of all senior students on comprehensive examinations, licensure examinations, and other standardized tests. When the students were asked to rate the formal classes, clinical laboratory, and simulation laboratory, they said they were "excellent" or "very helpful." When classes taught by a nurse practitioner were received less favorably, project staff took over these classes. Students indicated that the experience in neonatal intensive care was the most beneficial and that direct clinical experience in dealing with emotionally disturbed children would be a desirable addition to the course.

A comparison of Dillard students' nurse licensure examination scores for the years 1979 and 1980 shows a remarkable increase in the number of students scoring one and two standard deviations from the mean. Although no direct cause-effect relationship can be determined, the only change in curriculum between the two years was the addition of the course in Nursing of Children.

Conclusions and Future Plans

In 1979, students were surveyed and asked what other electives they preferred. The courses they named most often were nutrition, pharmacology, and health assessment, but when these electives were scheduled, too few students enrolled to merit the school's offering the courses. To everyone's amazement, every senior student in the 1982 class chose to enroll in the advanced pediatric nursing elective. Students reported that the enrollment increases reflected the reputation of the elective. Both RN and generic students liked the relaxed atmosphere of the classes and reported that it produced greater self-esteem and confidence in themselves. Beginning students say that anxiety about doing accidental harm to small children, which is universal among the students, is alleviated by the course activities.

Faculty members believe that the course has amply demonstrated the value of the simulation laboratory for teaching physical assessment skills and improving students' communication and counseling skills with parents and children. Further, the laboratory had provided a service to members of the community.

After the elective was instituted, many students who completed the course chose to work with children. Of the 23 students taking the course in 1980-81, five are engaged in pediatric practice, and interest in pediatric work among the others remains high. Nursing service personnel are enthusiastic about the graduates and report that the time they require for orientation is less than that required for other nurses.

Project leaders concluded that the elective is relevant to today's practice settings. It provides an opportunity for interdisciplinary teaching to solve the problems that arise when students receive an education that has a lot of everything and not enough of any one thing. As a bonus, the faculty members were able to increase their rapport with children's agencies in New Orleans and to establish opportunities for collective decision making about the quality of practice.

Hampton Institute

The baccalaureate nursing curriculum at Hampton Institute is based on two premises: first, that society has acknowledged the individual's right to health, and second, that health care is broader and involves more than traditional medical care and nursing care do. During the 1970s, the conviction grew among the Hampton nursing faculty that a clinical elective in physical and mental assessment would enhance the professional capabilities of the graduates of the program. Regardless of the setting in which the graduates eventually might work, such preparation would enable them to respond more fully to changing health care needs. Moreover, the addition of such an elective would facilitate the integration of assessment skills throughout the curriculum.

Hampton has always maintained a flexible stance and has historically made many changes in response to changing social circumstances. Indeed, Hampton was originally founded to meet a rapidly emerging social need when, during Reconstruction, the Freedmen's Bureau was attempting to solve the many problems of the thousands of former slaves who had gathered behind Union lines on the Virginia Peninsula. General Samuel Chapman Armstrong, the founder, established the school in 1868 to train selected young men and women to teach and lead.

Initially the educational program was based on the incoming students' "ability to read and write intelligibly" and their "knowledge of arithmetic through long division." Soon, courses leading to the bachelor of science degree were offered, and elementary and secondary level courses were dropped. Graduate studies, first offered in 1928, were reactivated and expanded in 1956. Today, Hampton Institute is a fully accredited, degree-granting institution with a program organized in six academic divisions and 26 major areas. It occupies 115 buildings on 210 acres of waterfront property in Tidewater, Virginia.

The School of Nursing

The origin of the nursing program offers an excellent example of Hampton's responsiveness to emerging needs. During World War II, the War Manpower Commission called attention to the critical need to increase the nation's nurse force if serious health hazards were to be avoided in both military and civilian life. When Congress passed the bill creating the Cadet Nurse Program in 1943, Hampton Institute conducted a feasibility study with area hospitals and other appropriate agencies, and opened a nurse training program in 1944.

The four-and-a-half-year curriculum of the Department of Nurse Education was divided into pre-professional and professional components in 1946. The pre-professional courses were offered on the campus and the professional courses were taught at the sites of affiliated institutions: St. Phillip School of Nursing in Richmond, Virginia; Brooklyn State Hospital in Brooklyn, New York; and Norfolk City Union of the King's Daughters Visiting Nurse Service. As student enrollment increased, affiliations in public health were expanded to include agencies in Staten Island, New York; Washington, D.C.; and Bayonne and Hackensack, New Jersey.

Following an institutional self-study in 1954-55, the Department of Nurse Education became the Division of Nursing and the program in nursing was changed to correspond with that of other divisions of Hampton Institute. By 1961, local facilities had become available for clinical instruction in all fields except public health and psychiatric nursing. Today, all clinical instruction is obtained in various area health care agencies and conducted under the direction of the faculty of the Department of Nursing. In 1972 the Division of Nursing became the Department of Nursing in the Division of Pure and Applied Sciences.

The four-year undergraduate program at Hampton leads to the degree of Bachelor of Science in Nursing. The curriculum in nursing is based on a foundation derived from courses in the liberal arts, the humanities, the natural sciences, and the behavioral sciences, which are integrated throughout the nursing curriculum, beginning with the freshman year and decreasing in proportion during the other three years of the program.

The master's program was initiated in January 1976, with majors in community health and community mental health nursing. In September 1977, the major in advanced adult nursing (medical-surgical) was added. The graduate program is three semesters and one summer session long and leads to a Master of Science in Nursing degree.

Developing the Elective

The faculty found that it was more difficult to place beginning practitioner content in the baccalaureate curriculum than it was to find an instructor with physical assessment skills and some community health experience. The curriculum change meant that all members of the faculty, regardless of clinical interest and specialization, had to broaden their conception of the nursing role.

The course was planned by a three-member faculty curriculum committee, including a physician who served as a consultant on physical assessment techniques, who assessed learning needs, reviewed student progress, worked out scheduling, and revised course plans and content. At the end of the first project year, the committee sent the course outline to all nursing faculty for their review. Feedback from this circulation and the year's experience with the course served as the basis for revising the course.

Course planners made use of materials and the experience acquired in special summer sessions conducted by Virginia Commonwealth University's School of Nursing. These sessions were offered under the auspices of another NCP project designed to provide learning materials and instruction in physical and emotional assessment and screening for baccalaureate faculty (see Part One of this report).

Hampton's course was organized into three major units: concepts in primary health care, health history, and physical examination. The course design integrated the nursing process into the concept of primary care, and placed emphasis on the collection of data by the beginning practitioner. Learning experiences were planned to enable the student to acquire the theory and skills of health assessment. The focus was on wellness: the parameters of normal health were incorporated into the process of obtaining a health history and performing a physical examination. Having established these concepts and procedures, the faculty could then concentrate on developing students' recognition of deviations from normal.

The elective was open to all students who had completed anatomy, physiology, and the beginning nursing courses, prerequisites normally taken in the sophomore year. Though the elective course was originally planned for six credit hours, an assessment of student course load revealed that this would constitute an overload. The credit hours were therefore reduced to four, after the planning committee determined that the material could be presented within this limit. Content on mental assessment was condensed and included with that on interviewing and communication skills. The elective was then offered as a four-credit course, consisting of three hours of lecture and three clinical hours each week.

Implementing the Elective

Initially, the elective was offered during three academic semesters and one summer session to a

total of 28 students, nine of whom were RN students. As the course became more popular, it became necessary to limit enrollment to 14 to insure adequate clinical supervision and equitable allocation of assessment instruments. Course activities included lectures with discussion, demonstrations, work in the autotutorial laboratory, and clinical experience.

The space limitations and time constraints of the accessible outpatient agencies made them logistically unsatisfactory for this course, and so an inpatient facility, the Veterans Administration Hospital, was used for clinical practice. This arrangement had the advantage of allowing the student to proceed at a slower pace and, thus, to achieve competency in physical assessment.

Each student was required to write up four health histories and to conduct and record six physical examinations on hospitalized clients. Teachers of other nursing courses helped the students locate appropriate clients for history taking. The final test of a student's skill in physical examination was performed on a classmate.

The course was conducted by an experienced faculty member, who had overall responsibility for teaching and administering the course. A physician taught and acted as preceptor for the physical assessment component. This doctor, a member of the nursing faculty, was charged additionally with integrating physical and mental assessment skills throughout the nursing curriculum.

Outcomes and Conclusions

In addition to maintaining an ongoing evaluation of student learning, the project administered a questionnaire to students after graduation. Its purpose was to elicit information about how well the course had met their needs for the knowledge and skills, how well they were able to integrate these into their nursing care in any setting, and how comfortable they were in using them. Replies were very positive. Students enjoyed using their newly learned skills, felt additional self-confidence, and assumed a collaborative role in practice. (A research associate helped faculty to develop evaluation instruments.)

Faculty satisfaction with the course was also ascertained, with the result that the physical assessment course was made a permanent addition to the curriculum and a requirement for RN students.

The reputation of the elective soon spread, and the planning committee that prepared the elective was asked to conduct a physical assessment workshop not only for Hampton Institute nursing faculty but for other RNs in the area. The workshop was done in cooperation with the Hampton Institute Coordinator of Continuing Education.

Conclusions from Both Projects

Electives, relatively new in 1972 when the NCP began, are now widely available in baccalaureate nursing programs. Often these courses are not labeled "electives" and are called "independent study" or "field study," but essentially they are all alike in providing students the opportunity to pursue a particular interest or develop individual ability.

Not all electives offer clinical study, although direct work with patients is preferred by students who view such experience as being particularly relevant to their future practice. Electives that focus on assessment and screening in primary practice have been especially well received by both students and faculty because students know that the delivery of primary health care is changing and that the level of illness of hospitalized patients is rising. As a consequence, they are especially attracted to the nurse practitioner role, especially those students who expect to enter graduate study in nursing. The clinical experience encountered in an undergraduate elective gives them the opportunity to try their hand at the beginning skills that will be required of them later.

These students are drawn by the expectation of opportunities in a variety of fields:

Industry. The nurse in industry is in a unique position to introduce health maintenance programs, monitor hazards in the work place, and identify stresses and strains that the workers experience. Kodak, for example, employs 33 nurse practitioners. Novices note with interest that practitioners are also employed by insurance companies as consultants to industry on health care programs for workers. In Philadelphia, the Health Services Corporation contracts with several industries to provide primary health care services such as pre-employment physicals, appraisal of hazards (blood chemistry levels, excessive stress, physical dangers), special programs for alcoholism and other chronic diseases, primary care services for illness, and educational programs. Clients include both small and large businesses.

Schools. School nurses, particularly if they are practitioners, can be important in delivering affordable health care services to children. In fact, one ma-

jor funding effort of recent years was directed to developing a network of school health programs in five states where school nurse practitioners addressed the health-illness needs of children in an effort to improve child health practice generally. The focus was on comprehensive assessment and management of care, with a special emphasis on health education as a means of changing childrens' and families' health behavior. In addition, the "mainstreaming" of handicapped children in the schools has increased the demand for more sophisticated practice by school nurses.

Geriatrics. A few nurses wish to practice in nursing homes, extended care facilities, and day care centers for the elderly. Nurse practitioner skills of some order are required for the advanced levels of service in such institutions. The assessment and screening abilities acquired in a baccalaureate program lead to nurse practitioner services that have been particularly effective in improving the care of the aged.

Rehabilitation. Home visiting to handicapped individuals and management of their health-illness problems will be another task the practitioners might perform in the future. The nurse might provide the patient in the home badly needed continuity and coordination of the total care program.

Community Health Agencies. Community health agencies, many observers feel, will continue to increase the number of nurse practitioners on their staffs. This will continue to prove to be a cost-effective way to deliver services that are highly desirable to consumers.

Hospitals. Cardiovascular, intensive care, and neonatal units are all using nurse practitioners to deliver high-quality tertiary care. Aware of the premium placed by institutions on skills at these levels, they naturally wish to acquire as many of the beginning abilities in these areas as is practical.

In 1976, when the NCP demonstration projects were being planned, the staff assumed that only a few schools of nursing had completed the curricular changes necessary to incorporate patient assessment and screening abilities into the baccalaureate curriculum. Actually, when project work began, it was found that some of the region's schools had made considerable progress in initiating these changes, while others were actively getting the work underway.

The new content was placed in the curriculum at all levels from the sophomore to the senior year, and the approaches of the various schools differed. In some, the content was integrated throughout all the courses, while in others it was located in an especially designed course that was required of all students. However, most schools offered the content and activities as an elective.

The clinical elective projects at both Dillard University and Hampton Institute demonstrated the efficacy of offering electives in assessment and screening abilities in the baccalaureate program. In summary, the NCP's experience with both programs included the following conclusions:

- Student acceptance of these electives is quite high. At Hampton, the faculty had to limit enrollment because of oversubscription. At Dillard, the entire class of 1982 enrolled in addition to the majority of students in the two preceding senior classes.
- Electives improve the work performance of the novice graduate. Orientation time at work sites is reduced, and it appears that the novice brings more knowledge and ability to the work setting.
- Faculty development programs are important, especially in colleges and universities not located in a health science center, so that instructors teaching the electives can update and upgrade their assessment and screening abilities.
- Electives provide a means for students to explore their own potential and identify possible avenues of specialization; they can be very helpful to students who wish to determine a graduate major or future field of employment.

Clinical electives are conducive to a revitalization of the basic generalist's curriculum at the baccalaureate level. The electives that were offered at Dillard University and Hampton Institute both demonstrated that electives:

- provide opportunities for interdisciplinary education (physicians participated in each program) and include the possibility for other courses developed jointly by nursing and other health care disciplines;
- enhance the flexibility of the baccalaureate curriculum, providing students with an opportunity to pursue a special interest or talent;
- furnish a vehicle for adapting the generalist's curriculum to the changing health care scene.

Clinical electives are also improving community-school of nursing relationships by:

- making the school of nursing more visible in the local primary health care community;
- assisting schools of nursing to discover opportunities for clinical practice sites unknown to them in the past;
- gaining more acceptance for the nursing roles students wish to practice upon graduation.

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